## ABSTRACT

A method of decoding symbols in which a first codeword has been spread by a second codeword to recover first information and second information is provided. The decoding occurs jointly, with an overall output determining both the first and second information. A first parallel code multiplying operation for each codeword of the second code is followed by a second parallel code multiplying operation for the first code. An overall maximum output of the second parallel code multiplying operations determines the output information.